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Liu

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(54) **USER PROXIMITY SENSOR AND SIGNAL PROCESSING CIRCUITRY FOR DETERMINING WHETHER TO POWER A COMPUTER ON OR OFF**

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(57) **ABSTRACT**

A computer system having a sensing circuit for detecting a user status and switching a computer accordingly as well as an automatic networking capability. As a user walks into a sensing area, the computer starts up automatically so that some waiting time can be saved. Similarly, when the user walks away from the sensing area, the computer shut down automatically so that some power can be saved. The computer system includes a signal generator that sends out a transmission signal for determining if a user is within a detectable region. A signal receiver emits an appropriate status signal after picking up the transmission signal from the detection region. The status signal is processed by various devices including an analogue/digital converter, a delay unit, a logic circuit and a microprocessor before arriving at a power-triggering mechanism to switch on or off the computer accordingly.

29 Claims, 6 Drawing Sheets